

PHILOSOPHICAL TRANSACTIONS.

Febr. 10. for the Months of *January* and *February*, 1678.

The Contents.

The manner of Hatching Chicken at Cairo ; observed by Mr. John Graves, and communicated by Sr. George Ent. A Relation concerning Barnacles ; by Sr. Robert Moray. A Description of the Island Hirta ; communicated also by Sr. Robert Moray. Some Observations of a Cameleon ; made by Dr. Jonathan Goddard. An Account of the Iron-Works in the Forest of Dean ; communicated by Henry Powle, Esquire. A Relation of the making of Ceruse ; by Sr. Philiberto Vernatti. An Account of Two Books : I. The true Intellectual System of the Universe. The First Part ; by R. Cudworth, D. D. II. The Six Voyages of John Baptista Tavernier, published in English.

The manner of Hatching Chicken at Cairo , observed by Mr. John Graves, sometime Professor of Astronomy at Oxford ; and communicated by Sr. George Ent, late President of the College of Physicians, London.

They begin in the midst of *January* to heat the Ovens : spending every Morning an hundred *Kintars* (or an hundred pound weight) of *Camels*, or of *Buffulo's* Dung ; and the like proportion at Night, till the midst of *February*. About which time the Ovens are so hot, that one cannot well endure to lay his hand upon the Walls.

After this, they put the Eggs into the Ovens to hatch the Chicken ; which they continue successively till the end of *May*.

The Eggs are first put upon Mats in the lower Ovens, which are upon the ground; seven or eight Thousand Eggs in number; and laid only double one upon another.

In the Ovens above these lower, the Fire is made in long Hearths or little Channels, having some depth to receive the Fire: from whence the heat is conveyed into the lower Ovens before mentioned. The Eggs which are directly under these Hearths, lie treble one upon another; the rest, as was said, only double.

At Night, when they new-make the Fires in the Hearths above-mention'd; they then remove the Eggs that were directly undermost (lying three one upon another) in the place of those which lay on the sides only double: and these being now removed, they lay treble under the Hearth, because the heat is greater there, than on the sides where the Eggs are only double.

These Eggs continue in the lower Ovens fourteen days and nights: Afterwards they remove them into the upper Ovens; which are just over the lower. In these (there being now no more Fire used) they turn all the Eggs four times every day; *i. e.* in every 24 hours.

The 21 or 22 day the Chicken are hatch'd: which the first day eat not; the second, they are fetch'd away by Women, who give them Corn, &c.

The Master of the Ovens hath a third part of the Eggs for his cost and pains: out of which, he is to make such good unto the Owners (who have two thirds in Chicken for their Eggs) if any happen to be spoiled or miscarry.

The Fire in the upper Ovens, when the Eggs are placed in the lower, is thus proportion'd:

The first day, the greatest Fire. The second, less than the first. The third, less. The fourth, more than the third. The fifth, less. The sixth, more than the fifth. The seventh, less. The eighth, more. The ninth, without fire. The tenth, a little fire in the Morning. The eleventh, they shut all the holes with Flax, &c. making no more fire; for if they should, the Eggs would break.

They take care, that the Eggs be no hotter than the Eye of a man, when they are laid upon it, can well endure.

When

When the Chicken are hatch'd, they put them into the lower Ovens, which are covered with Mats. Under the Mats is Bran, to dry the Chicken: and upon the Mats, Straw, for the Chicken to stand upon.

The Ground-plot of the House and Ovens is delineated according to *Fig. 1.* *a b* A long entrance: on each side of which are fourteen Ovens (some places have more, some less.) The bottoms and sides of those Ovens which are on the ground, are all made of Sun-dry'd Bricks; upon which they put Mats, and on the Mats the Eggs.

The top of these Ovens are flat, and covered with sticks, except two long Spaces which are made of Sun-dry'd Bricks; and are the Hearths above-mentioned, in which the fires are made, to heat the Eggs lying under them in the lower Ovens.

Above these lower Ovens are so many other, made of Sun-dry'd Bricks, and arched at the top. Where also there are some holes, which are stop'd with Tow, &c. or left open, as they please to govern the heat in the Ovens below.

The Plant of the upper Oven is according to *Fig. 2.*

a The Mouth of the Oven, opening upon the long entrance *a b* above mentioned.

b and *c* Entrances into the Ovens adjoining.

d e Two Hearths three or four Inches deep, in which they make the fire, to heat this and the Oven below.

The depth of the lower Oven is about $2\frac{1}{2}$ foot *English*. The second, above four.

A Relation concerning Barnacles, by Sr. Robert Moray, lately one of his Majesties Council for the Kingdom of Scotland.

IN the Western Islands of *Scotland* much of the Timber, wherewith the Common people build their Houses, is such as the West-Ocean throws upon their Shores. The most ordinary Trees are *Firr* and *Alb*. They are usually very large, and without branches; which seem rather to have been broken or worn off, than cut: and are so Weather-beaten, that there is no Bark left upon them, especially the *Firrs*. Being in the Island of *East*, I saw lying upon the shore a cut of a large *Firr-tree* of about $2\frac{1}{2}$ foot diameter, and 9 or 10 foot long; which had lain so long out of the water, that it was very dry: And most of the Shells, that had formerly cover'd it, were worn.

